It is evident therefrom that the best resolution (lower peak width) is for that series obtained with the polymer T24 (prepared from macromonomers having an average molecular mass of 15 000), and that the media based on T25 and T26 also give very satisfactory results sufficient to carry out good quality sequencing.

Trial 4-9

Separation of reaction products of sequence using a separation medium according to the invention at constant temperature.

The medium tested is of the T16 type, at 5 g/100 ml, in 50 mM Na TAPS buffer containing 2 mM EDTA and 7M urea, the said medium being introduced into the capillary at 50°C, and the separation also being carried out at 50°C. An ABI 310 apparatus is used.

It is noted that the reading can be carried out very well up to more than 500 bases, and that the introduction at low temperature is not, in this precise case, essential to using the medium according to the invention. This advantageous property results from the fact that the medium is of the thermoviscosifying type and does not therefore exhibit, at the temperature at which the separation is carried out, a gel-type state which would prevent its introduction into the capillary.

EXAMPLE 5:

Preparation of PVA-NIPAM (PolyVinyl Alcohol/Poly-N-Isopropylacrylamide) copolymers.

The polyvinyl alcohol constituting the water-soluble skeleton of the copolymer is obtained beforehand by hydrolysing polyvinyl acetate. The polymer used for the study has an acetate level of 12.4 mol% and a weight-

average molar mass of 145 000 g/mol. Its intrinsic viscosity in water at 30°C is 92 ml/g, the critical concentration for covering the C* chains is about 1.25 g/100 ml.

The route of synthesis followed is of the "grafting from" type. It is described by Nonaka et al. in homogeneous medium (Y. Nonaka, Y. Ogata, S. Kurihara, Journal of Applied Polymer Science, vol. 52, 951-957 (1994)) or Ikada et al. in the case of a poly(methyl methacrylate) skeleton (Y. Ikada, Y. Nischizaki, I. Sakwada, J. Polym. Sci., Vol. 12, 1829-1839 (1974)).

The synthesis is carried out at 60°C for 20 hours in dimethyl sulphoxide (DMSO), in the presence of potassium persulphate (KPS) in order to generate radicals on the PVA skeletons. These radicals then induce the polymerization of the monomer present in the medium, leading to the final product.

The formation of carbonyl groups according to a secondary reaction of ketoenolic tautomerism causes the appearance of a yellow colour which is effectively observed during the synthesis.

Table 3 below presents the characteristics of the PVA-NIPAM obtained according to this protocol.

TABLE 3

	m (g) or V (ml)
PVA	5 g
NIPAM	5 g
KPS	0.08 g
DMSO	100 ml
KPS/PVA molar ratio	0.26
homoNIPAM m (g) Mw[b] (g/mol)	0.772 19 300
Copolymer m (g) yield (%)	8.9 89
Grafting level[c] % weight NIPAM	32.3

[b] determined by SEC in THF at 40°C, with ultrastyragel column (Waters 150 CV+ chromatograph), refractometric detection and single calibration with respect to polystyrene standards.

[c] determined by NMR.

EXAMPLE 6:

Preparation of a linear triblock copolymer POP-POE-POP

This copolymer is prepared according to a protocol derived from that described by J.P. Kaczmarski and J.E. Glass, Langmuir, 1994, 10, 3035-3042.

About 10 g of polyethylene glycol having a molecular weight of 35 000 (Merck, Hohenbrunn, D) (PEG) and 100 ml of anhydrous toluene are mixed under an argon atmosphere (the low-molecular-weight polyoxyethylenes are commonly called "polyethylene glycol"). Once the PEG is dissolved in the toluene, the mixture is heated under reflux under argon and approximately 10 to 15 ml